



QBL912ZC-IR3

1.8mm Round Subminiature
“Z-Bend” Lead IR LED

QT-Brightek 1.8mm Round Subminiature LED Series

1.8mm Round Subminiature “Z-Bend” Lead IR LEDs

Part No.: QBL912ZC-IR3

IR3: 850nm

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Introduction

Feature:

- Water clear lens
- Package in tape and reel
- AlGaAs technology
- Viewing Angle = 20 deg
- Reverse Mount

Description:

This 1.8mm round subminiature IR lamp with z-bend lead configuration is suitable for surface mount applications.

Application:

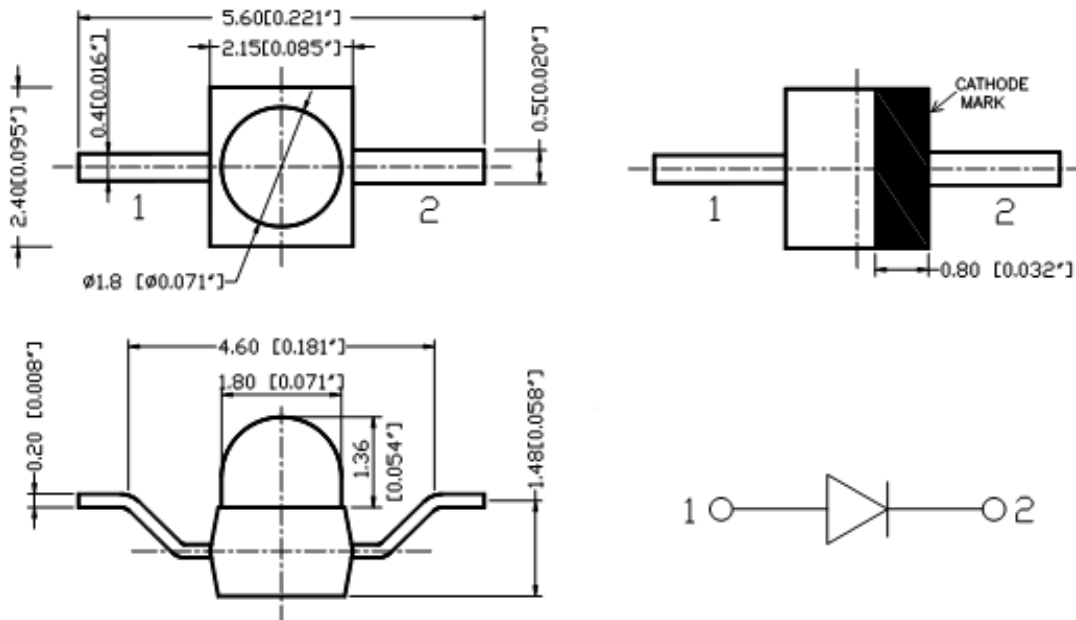
- Infrared Sensor
- Optoelectronic Switch
- Smoke detector
- Drive sensor

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.2mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)		λ _P (nm)			I _e (mW/sr)		
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.
QBL912ZC-IR3	Infrared	100	1.5	1.8	835	850	860	19	22	24.3

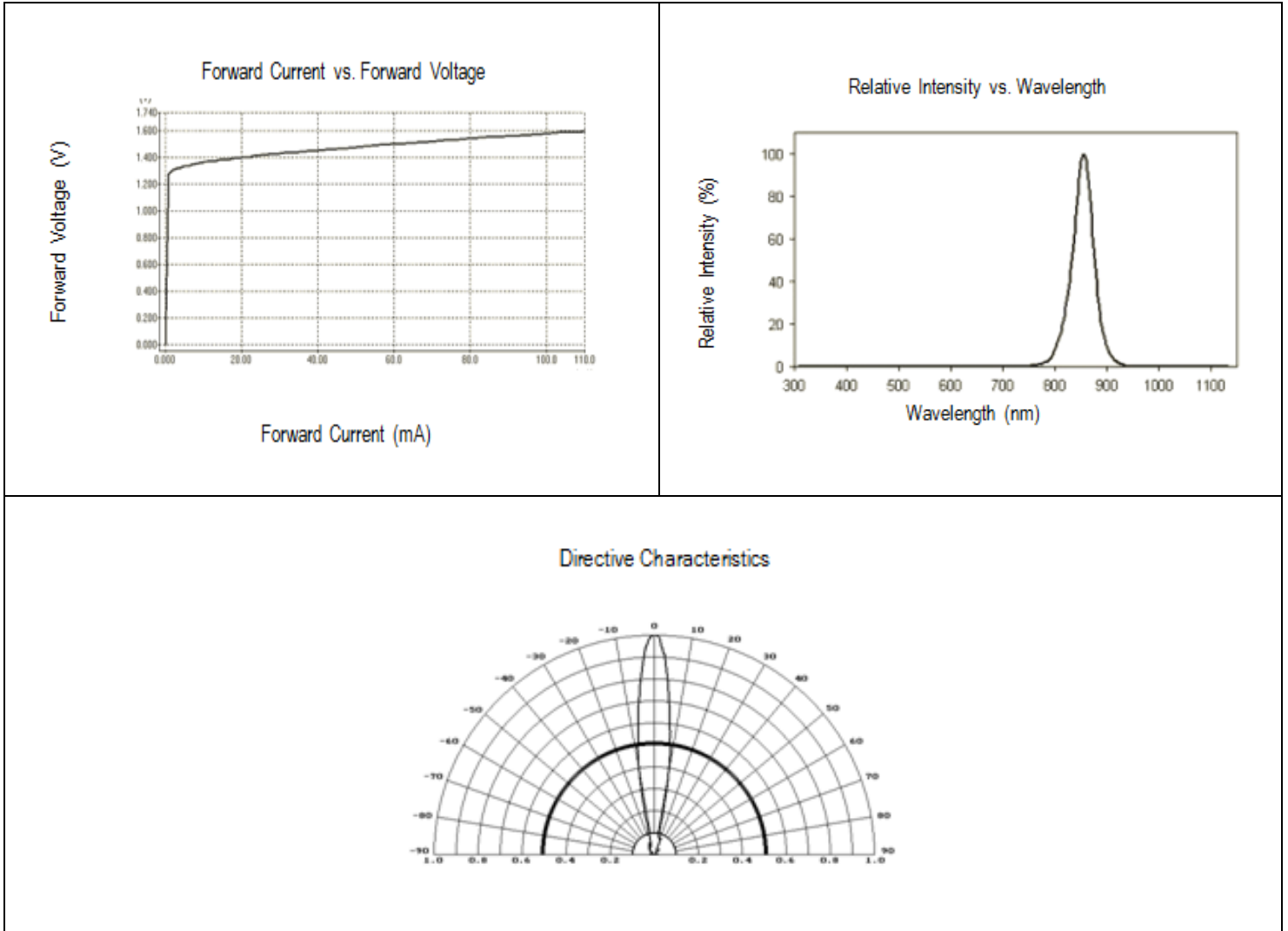
Absolute Maximum Rating

Material	P _d (mW)	I _F (mA)	I _{FP} (A)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SO L} (°C)**
AlGaAs	180	100	1	5	-40 ~ +80	-40 ~ +85	260

*Duty cycle=1%, Pulse width 100us

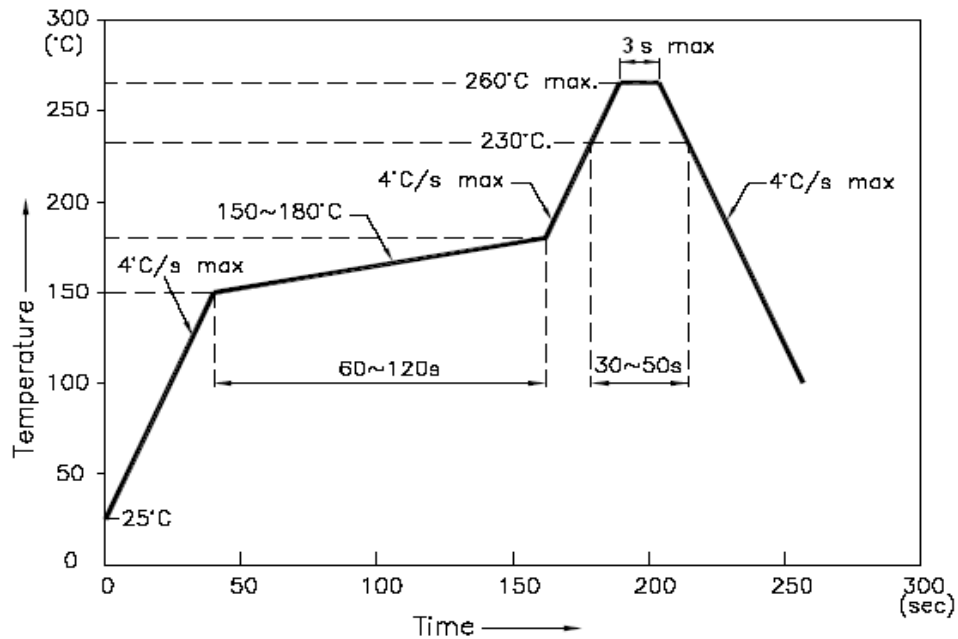
**IR Reflow for no more than 3 sec @ 260 °C

Characteristic Curves

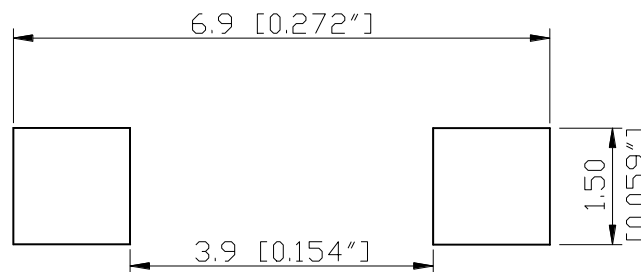


Solder Profile & Footprint

- Recommended tin solder specifications: melting temperature in the range of 178~192 °C
- The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



Recommended Pad Layout



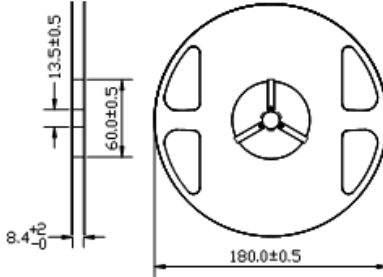
Units: mm

Tolerance: ±0.2mm

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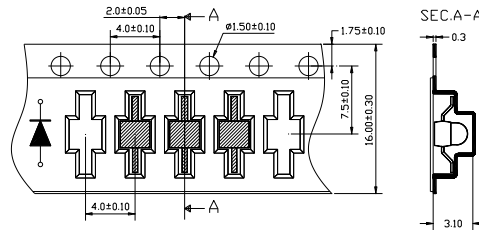
Packing

Reel Dimension:



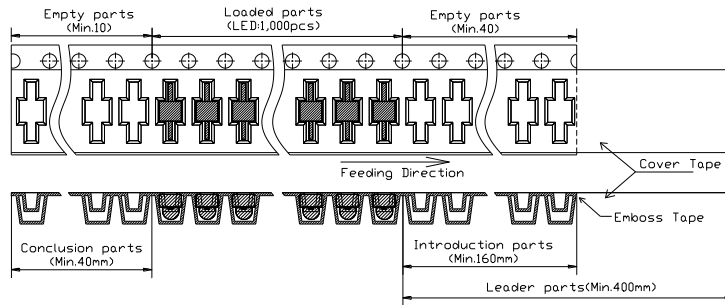
Unit: mm

Tape Dimension:

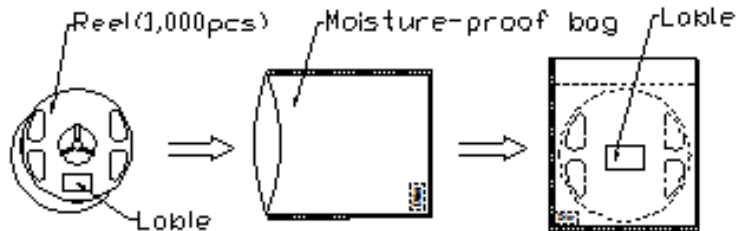


Unit: mm

Arrangement of Tape:



Packaging Specification:



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Labeling



Part No: _____
Customer P/N: _____
Item: _____
Q'ty: _____
Vf: _____
Iv: _____
WI: _____
Date: _____

Made in China

Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBL912ZC-IR3	QBL912ZC-IR3	I _e =22mW/sr typ. @ I _F =100mA / λ _P =850nm typ.	1,000 units



Revision History

Description:	Revision #	Revision Date
New Release of QBL912ZC-IR3	V1.0	05/14/2015
Update wavelength Min. value to 835nm / update logo	V1.1	06/11/2021

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2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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